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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,855	11/05/2001	Ronald W. Fraser	GP-301724	6003

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EXAMINER	
PHAM, TUAN	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,855	FRASER ET AL.	
	Examiner	Art Unit	
	TUAN A. PHAM	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 08/08/2006 have been fully considered but they are not persuasive.

In response to applicant's remark on page 8, Applicant argues that the examiner has fails to combine Nordlund and Maloney references in claims 22 and 31, and applicant also alleges that there is no motivation to combine Nordlund and Maloney.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. It appears applicant is attacking individual merits of Nordlund and Maloney and concludes that there is no impetus to combine them. However, the 103 rejection is in consideration of Nordlund and Maloney as a whole. One cannot show non-obviousness by attacking references individually. In re Keller, 208 USPQ 871 (CCPA 1981). The test for obviousness is not whether features of one reference may be bodily incorporated into the other to produce claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in pertinent art. In re Bozek, (CCPA) 163 USPQ 545. The question in a rejection for obviousness on a combination of references is what secondary reference would teach one skilled in the art and not whether its structure could be bodily substituted in basic reference structure. In re Richman, 165 USPQ 509 (CCPA 1970). In this regard, the intent of Maloney as a secondary teaching is not to combine its structural features into Nordlund, but rather to use the teaching of Maloney to teaches a land station to instruct the mobile to adjust its radiated power. Therefore, there is an existing a strong

prima facie case of obviousness under 35 U.S.C 103, and proper to combine Nordlund and Maloney.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in order to determined the location of a mobile radio transceiver without requiring a GPS receiver and the cost of the system is low as suggested by Maloney at col.7, ln.39-46.

In response to applicant's remark on page 7, Applicant argues that the Maloney reference does not teach adjusting the signal level in claims 21 and 31.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. Maloney disclosed the radiates a RF signal 111 which is send to the land stations 103, 104 (see figure 6), and the land station will sent the instruction to the mobile to adjust its radiated power (col.15, ln.5-10). Furthermore, the ordinary skill in the art will recognize radiates power is represent for the signal strength, signal level, or RF signal. Therefore, Maloney reference is still applied.

In response to applicant's remark on page 8, Applicant argues that the Maloney reference does not teach the signal level is adjusted more than one time.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. Maloney disclosed the mobile adjusted its radiated power, but silent on adjusted more than one time. One skill in the art should recognize that the mobile continuously adjust the power up or down as it close to the based station to reduce interference caused by surrounding cells.

In response to applicant's remark on page 8, Applicant argues that the examiner has fails to combine Nordlund, Maloney, and Hayashi references in claim 40, and applicant also alleges that there is no motivation to combine Nordlund, Maloney, and Hayashi.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. It appears applicant is attacking individual merits of Nordlund, Maloney, and Hayashi and concludes that there is no impetus to combine them. However, the 103 rejection is in consideration of Nordlund, Maloney, and Hayashi as a whole. One cannot show non-obviousness by attacking references individually. In re Keller, 208 USPQ 871 (CCPA 1981). The test for obviousness is not whether features of one reference may be bodily incorporated into the other to produce claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in pertinent art. In re Bozek, (CCPA) 163 USPQ 545. The question in a rejection for obviousness on a combination of references is what secondary reference would teach one skilled in the art and not whether its structure could be bodily

substituted in basic reference structure. In re Richman, 165 USPQ 509 (CCPA 1970). In this regard, the intent of Maloney and Hayashi as a secondary teaching is not to combine its structural features into Nordlund, but rather to use the teaching of Maloney and Hayashi to disclosed a land station to instruct the mobile to adjust its radiated power by increment or decrement. Therefore, there is an existing a strong prima facie case of obviousness under 35 U.S.C 103, and proper to combine Nordlund, Maloney, and Hayashi.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in order to determined the location of a mobile radio transceiver without requiring a GPS receiver and the cost of the system is low as suggested by Maloney at col.7, ln.39-46.

Base on the above rational, it is believed that the claimed limitations are met by the combination of Nordlund, Maloney, and Hayashi and therefore, the 103 rejections as set forth in the last Office Action stand.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 22-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordlund (U.S. Patent No.: 6,112,093) in view of Maloney (U.S. Patent No.: 6,288,676).

Regarding claim 22, Nordlund teaches a method of adjusting a signal level of a signal sent by a mobile transceiver comprising (see figure 1):

connecting a call between the mobile transceiver (see figure 1, mobile 120a) and a land-based station (see figure 1, PSTN 160), wherein the call connects through a mobile communication network (see figure 1, MTSO 150) and a land-based calling network (see figure 1, PSTN 160, col.4, ln.50-67, col.5, ln.1-10), and

determining, at the land-based station, a measurement of the signal level of the signal sent by the mobile transceiver and received at the land-based station during the call (see col.2, ln.25-45).

It should be noticed that Nordlund fails to teach responsive to the measurement, sending a signal level instruction from the land-based station to the mobile transceiver; and adjusting the signal level of the signal sent by the mobile transceiver responsive to the signal level instruction. However, Maloney teaches teach responsive to the measurement, sending a signal level instruction from the land-based station to the mobile transceiver (see col.15, ln.1-17); and adjusting the signal level of the signal sent by the mobile transceiver responsive to the signal level instruction (see col.14, ln.42-67, col.15, ln.1-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Malony into view of Nordlund in order to determine the location of a mobile radio transceiver without requiring a GPS receiver and less expense as suggested by Maloney at column 7, lines 39-47.

Regarding claim 23, Maloney further teaches generating a first modem carrier signal from the land-based station after the connecting of the call, and generating a second modem carrier signal from the mobile transceiver in response to the first modem carrier signal, wherein the signal level of the mobile transceiver represents the second modem carrier signal received the land-based station (see col.14, ln.42-67, col.15, ln.1-17. First, the land-based station sends a first frequency to the mobile transceiver. In

response, the mobile will generate the second frequency sending back to land-based station. The land-based station is based on the second frequency received from mobile, then the land-based will instruct the mobile to adjust the operating frequency).

Regarding claim 24, Maloney further teaches the second modem carrier signal level is adjusted more than one time during the call (see col.15, ln.1-17, One skill in the art should recognize that the mobile continuously adjust the power up or down as it close to the based station to reduce interference caused by surrounding cells).

Regarding claim 25, Nordlund further teaches the measuring of the signal level of the mobile transceiver received at the land-based station comprises making a single measurement at a beginning of a data communication segment of the call (see col.2, ln.26-45).

Regarding claim 26, Nordlund further teaches the measuring comprises making a plurality of measurements throughout a communication session (see col.2, ln.26-45, it is obvious the land-based station will continue measure the signal strength from the mobile station).

Regarding claim 27, Nordlund further teaches a data mode and voice mode, wherein the mobile transceiver switches between the data mode and the voice mode during the call (see col.2, ln.46-60, dual mode).

Regarding claim 28, Nordlund further teaches the modem carrier is received from an analog modem (see col.1, ln.49-60).

Regarding claim 29, Nordlund further teaches the modem carrier is received from a digital modem (see col.1, ln.49-60).

Regarding claim 30, Nordlund further teaches the measuring of the signal level of the mobile transceiver received at the land-based station comprises making a measurement at a beginning of a data communication segment of each call (see col.2, ln.26-45).

Regarding claim 31, Nordlund teaches a method of adjusting a signal level of a signal sent by a mobile transceiver comprising (see figure 1):

the mobile transceiver (see figure 1, mobile 120a);

connecting a call between the mobile transceiver (see figure 1, mobile 120a) and a land-based station (see figure 1, PSTN 160), wherein the call connects through a mobile communication network (see figure 1, MTSO 150) and a land-based calling network (see figure 1, PSTN 160, col.4, ln.50-67, col.5, ln.1-10), and

determining, at the land-based station, a measurement of the signal level of the signal sent by the mobile transceiver and received at the land-based station during the call (see col.2, ln.25-45).

It should be noticed that Nordlund fails to teach responsive to the measurement, sending a signal level instruction from the land-based station to the mobile transceiver; and adjusting the signal level of the signal sent by the mobile transceiver responsive to the signal level instruction. However, Maloney teaches teach responsive to the measurement, sending a signal level instruction from the land-based station to the mobile transceiver (see col.15, ln.1-17); and adjusting the signal level of the signal sent by the mobile transceiver responsive to the signal level instruction (see col.14, ln.42-67, col.15, ln.1-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Maloney into view of Nordlund in order to determine the location of a mobile radio transceiver without requiring a GPS receiver and less expense as suggested by Maloney at column 7, lines 39-47.

Regarding claim 32, Maloney further teaches generating a first modem carrier signal from the land-based station after the connecting of the call, and generating a second modem carrier signal from the mobile transceiver in response to the first modem carrier signal, wherein the signal level of the mobile transceiver represents the second modem carrier signal received the land-based station (see col.14, ln.42-67, col.15, ln.1-17. First, the land-based station sends a first frequency to the mobile transceiver. In response, the mobile will generate the second frequency sending back to land-based station. The land-based station is based on the second frequency received from mobile, then the land-based will instruct the mobile to adjust the operating frequency).

Regarding claim 33, Maloney further teaches the second modem carrier signal level is adjusted more than one time during the call (see col.15, ln.1-17, it is obvious that the land-based station will adjust the operating frequency more than one time during the call).

Regarding claim 34, Nordlund further teaches the measuring of the signal level of the mobile transceiver received at the land-based station comprises making a measurement at a beginning of a data communication segment of each call (see col.2, ln.26-45).

Regarding claim 35, Nordlund further teaches the measuring comprises making a plurality of measurements throughout a communication session (see col.2, ln.26-45, it is obvious the land-based station will continue measure the signal strength from the mobile station).

Regarding claim 36, Nordlund further teaches the measuring of the signal level of the mobile transceiver received at the land-based station comprises making a measurement at a beginning of a data communication segment of each call (see col.2, ln.26-45).

Regarding claim 37, Nordlund further teaches a data mode and voice mode, wherein the mobile transceiver switches between the data mode and the voice mode during the call (see col.2, ln.46-60, dual mode).

Regarding claim 38, Nordlund further teaches the modem carrier is received from an analog modem (see col.1, ln.49-60).

Regarding claim 39, Nordlund further teaches the modem carrier is received from a digital modem (see col.1, ln.49-60).

4. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nordlund (U.S. Patent No.: 6,112,093) in view of Maloney (U.S. Patent No.: 6,288,676) and further in view of Hayashi (U.S. Patent No.: 6,697,634).

Regarding claim 40, Nordlund teaches a method for wireless mode carrier level control comprises (see figure 1):

Measuring a modem carrier signal strength of a mobile communication device (mobile 120a) at a land-based station (see figure 1, PSTN 160 is included land-based

station or central office for wire line), the land-based station connected to a land-based calling network (see figure 1, PSTN 160), the land-based calling network connected to a wireless network (see figure 1, MTSO 150), the wireless network connected to the mobile communication device (see figure 1, mobile 120a); and

Comparing the measured modem carrier signal strength to a prescribed level (see col.2, ln.25-45, col.6, ln.30-50).

It should be noticed that Nordlund fails to teach sending a modem carrier level instruction from the land-based station to a mobile communication device via the land-based calling network and wireless network, the modem carrier level instruction comprising a prescribed set of tone. However, Maloney teaches sending a modem carrier level instruction from the land-based station to a mobile communication device via the land-based calling network and wireless network (see col.14, 42-67, col.15, ln.1-17), the modem carrier level instruction comprising a prescribed set of tone (read on set of frequencies, col.14, 42-67, col.15, ln.1-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Maloney into view of Nordlund in order to determine the location of a mobile radio transceiver without requiring a GPS receiver and less expense as suggested by Maloney at column 7, lines 39-47.

Nordlund and Maloney, in combination, fails to teach increment or decrement the modem carrier level by a predetermined decibel level. However, Hayashi teaches such features (see col.4, ln.1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Hayashi into view of Nordlund and Maloney in order to determine the location of a mobile radio transceiver without requiring a GPS receiver and less expense as suggested by Maloney at column 7, lines 39-47.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Monell et al. (U.S. Patent No. 6,654,608), and Shen et al. (U.S. Patent No. 6,529,709) are not applied into this Office Action; they are also called to Applicants attention. They may be

used in future Office Action(s). These references are also concerned for supporting the system and method for isolating voice and data signals on a common carrier.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
October 5, 2006
Examiner

Tuan Pham

Supervisory Patent Examiner
Technology Center 2600

Matthew Anderson